

# **BERKELEY LAB**



LAWRENCE BERKELEY NATIONAL LABORATORY

# Berkeley Lab

# In the Community

# **Community Programs:**



# Workforce Development & Education As part of the Lab's education mission to inspire and prepare the next generation of scientists and engineers, the Workforce Development & Education runs numerous education programs for all ages of students—from elementary school to college undergraduates—as well as for high school and college science teachers.



#### Nano-High Started in 2003, Nano-High is a series of Saturday morning lectures focused on the cutting-edge scientific issues of the day, from molecular medicine to nanoscience, from solar energy to the math behind Sully, Remy and Buzz Lightyear. Nano-High talks are aimed at high school students.



Friends Of Berkeley Lab
Membership in Friends of Berkeley
Lab means being able to engage
directly with Lab scientists, tour the
Lab itself and participate in special
topic discussions. It also means
being the first to hear about new
discoveries, new content on our
website and special programs and
activities designed to broaden your
understanding of science.



Science At The Theater
Join a panel of scientists as they reveal
the latest research on subjects such as
cool roofs, dark energy, and carbon
reduction. These events, which are
sometimes standing room only, take
place in the Spring and Fall at the
Berkeley Repertory Theatre and are
free and open to the public.



Open House
Once a year Berkeley Lab opens its doors to the public for a free day of science and fun, including scientific demonstrations, lectures from some of the Lab's most eminent scientists, activities for children, tours of world-class facilities and opportunities for the public to learn about a broad range of science, from advanced computing to tabletop accelerators.



# **Community Programs:**



#### Community Advisory Group

The Berkeley Lab Community Advisory Group (CAG) was formed in 2010 to provide input into the Lab's physical plans and development projects. The CAG focuses primarily on land use, community health and safety, and the environment. CAG members include representatives from diverse groups interested in how the Lab's actions affect the quality of life and environment in Berkeley and the greater region.



#### Solano Stroll

Berkeley Lab participates each year in the East Bay's largest street festival by hosting a booth with activities such as "Ask a Scientist."



#### Education Program At SC Conference (Supercomputing)

Each year, the leading professional societies for computer science (ACM and IEEE) co-sponsor the SC Conference. Lab staff have participated in the conference's four-day education program open to high school and undergraduate teachers, where the teachers learn about high-performance computing and how it can be integrated into the curriculum.



#### Cal Day – UC Berkeley's Open House Lab staff host a booth to provide information to the nearly 40,000

attendees regarding the Lab's research and its student internship programs.



#### Support For Community Organizations

Berkeley Lab supports a variety of local, nonprofit community organizations. At Rebuilding Together, Lab employees work to make local home improvements to support low-income, disabled seniors. The Rising Sun Energy Center provides free workforce development training and to create green careers for youth and adults. The Lab has sponsored student work crews to perform energy audits and retrofitting of homes in Berkeley.



# **Community Programs:**



#### Human Resources Interview Training The Lab's Human Resources division worked with the California Department of Rehabilitation to conduct a one-day mock interview workshop for individuals with disabilities.



#### Albany High School's Annual Job Shadow Day

As part of Albany High School's annual Job Shadow Day, students shadow Berkeley Lab scientists, mathematicians, engineers, technicians, and communications staff. Based on their choice of potential career paths, students are matched with mentors at the Lab's main campus, the National Energy Research Scientific Computing Center (NERSC) in Oakland, and the Potter Street biosciences research center.



#### Information Technology (IT) Division's Second-Grader Workshop

The Lab's IT Division hosts Berkeley second-grade students every year for some hands-on computer fun. IT staff developed a curriculum that helps teach students how computers and networks support science at Berkeley Lab. Over 60 students and parents participated in the 2011 event, which one chaperone called "the best field trip of the year."



#### Nuclear Science Day For Girl Scouts And Boy Scouts

Sponsored by the Lab's Nuclear Science Division and the Work Development and Education (WD&E), the Lab hosts Scouts from more than 30 troops. Scouts receive a tour of the 88-Inch Cyclotron, build electroscopes and models of the atom, measure radioactivity, qualify for badges, and learn about career paths in nuclear science.



# **Community Objectives:**

- Community Engagement
- Enhancing Education
- Nurturing Local Business





**75%** 







Perception Survey results

$$\frac{40 - 60 - 80}{60 - 75 - 80}$$



## What the public likes about Berkeley Lab

- help the developing world
- bring real-life benefits (applied technology)
- fight climate change
- try to understand the universe
- support science education
- have a record of achievement (Nobel prizes)
- create jobs



# **Enhancing Education:**

Educational Visits (2013)			
5 <sup>th</sup> Graders			
	75 visits	32 students per visit	2400 per year
6 <sup>th</sup> Graders			
	36 visits	32 students per visit	1152 per year
Classroom Visits			43 per year
Undergraduate Internship Visits			94 per year

Workforce Development: 1000 university students per year as employees/interns; 500 postdocs on staff



# **Nurturing Local Business:**

# Procurement Dollars Spent

- Berkeley, \$22 M
- Walnut Creek, \$14M
- Oakland, \$3.8M
- Emeryville, \$390K



# **Nurturing Local Business:**

### Berkeley Suppliers

- A3GEO
- Ashby Plumbing Supplies
- Berkeley Plumbing & Heating
- Ellison Technologies
- Quantum Energy Technology Services

- Biointuition
- Rising Sun Energy Center
- Allan Kropp Associates
- IDS Courier







